Response

Serial No.: 10/811,175

Page 3 of 15

Amendments to the Claims

Please amend the claims as follows:

1. (Previously Presented) A slide mechanism for mounting a tie-down assembly on a trailer, comprising:

an elongated member having an axial length and a box-shaped beam defining a hollow interior, the elongated member, including:

a slot extending the axial length of the elongated member, the slot having a gap width; and

a channel disposed parallel to and in communication with the slot,
the channel having a width that exceeds the gap width of the slot; and
a carriage bolt having a head and an elongated neck, the head having a width
exceeding the gap width of the slot;

wherein:

the box shaped beam includes a top wall and a bottom wall, and a pair of side walls;

the elongated member further includes an elongated rail portion extending vertically from and generally aligned with one of the side walls of the beam;

the channel is configured to receive and maintain the carriage bolt head adjacent to the slot; and

the carriage bolt neck is configured to couple the tie-down assembly to the slide mechanism.

Claims 2-6 (Cancelled).

7. (Previously Presented) The slide mechanism of claim 1, wherein the top wall of the elongated member includes the slot and the channel disposed therein.

Response

Serial No.: 10/811,175

Page 4 of 15

8. (Currently Amended) The slide mechanism of claim 1, wherein the side wall of the box shaped beam [is aligned with the rail member and] includes the slot and the channel disposed along the side wall is aligned with the rail portion.

Claim 9 (Cancelled).

- 10. (Withdrawn) The slide mechanism of claim 1, wherein the elongated member includes a generally U-shaped plate having a first leg and a second leg and a top portion therebetween, and wherein a free end of each of the first leg and the second leg has a pair of winged end portions configured to couple with the trailer.
- 11. (Withdrawn) The slide mechanism of claim 10, wherein the slot and the channel are disposed along the top portion of the U-shaped plate.
- 12. (Withdrawn) The slide mechanism of claim 1, wherein the elongated member includes a vertical support disposed underneath the channel.

Claim 13 (Cancelled).

14. (Withdrawn) The slide mechanism of claim 13, further including an upper and a lower lip perpendicular with respect to the vertical portion.

Claims 15-16 (Cancelled).

17. (Withdrawn) The slide mechanism of claim 16, wherein the horizontal plate includes a pair of L-shaped legs coupled underneath the side portions.

Serial No.: 10/811,175 Response

Page 5 of 15

18. (Withdrawn) The slide mechanism of claim 1, wherein the elongated member includes a male adapter having a pair of downward extending lips.

- 19. (Withdrawn) The slide mechanism of claim 18, wherein the elongated member includes a female adapter having a generally U-shaped channel having a first leg coupled to the elongated member and a second leg, wherein the first and the second legs of the U-shaped channel are configured to receive one of the pair of downward extending lips of the male adapter, and wherein the pair of lips of the male adapter define a gap configured to receive the second leg of the U-shaped female adapter.
- 20. (Withdrawn) The slide mechanism of claim 1, wherein the elongated member includes a T-shaped vertical support disposed underneath the channel.
- 21. (Withdrawn) The slide mechanism of claim 1, wherein the elongated member includes a beam having a top wall and a bottom wall and a pair of side walls, wherein the slot is disposed along one of the side walls, and wherein the beam includes a first interior passage disposed between the channel and the top wall and a second interior passage disposed between the channel and the bottom wall.
- 22. (Withdrawn) The slide mechanism of claim 21, wherein the top and the bottom walls extend beyond the side wall to receive the tie-down assembly.

Page 6 of 15

23. (Previously Presented) A trailer frame for transporting a load, the trailer frame supported on an axle and a pair of wheels, comprising:

a tie-down assembly configured to secure the load; and

a slide mechanism configured to slidably couple the tie-down assembly to the trailer frame, the slide mechanism including:

an elongated member having an axial length, including:

a slot extending the axial length of the elongated member, the slot having a gap width; and a channel disposed in communication with the slot, the channel having a width that exceeds the gap width of the slot; and

a carriage bolt with a head having a width that exceeds the gap width of the slot;

wherein:

the channel is configured to maintain the carriage bolt head adjacent to the slot; the carriage bolt is configured to receive the tie-down assembly; and the tie-down assembly includes:

a ring having a linear portion, and

a mounting plate configured to couple the ring to the slide mechanism, the mounting plate including a raised portion configured to receive the linear portion of the ring and an opening to receive the carriage bolt.

Claims 24-26 (Cancelled).

Response

Serial No.: 10/811,175

Page 7 of 15

27. (Withdrawn) The trailer frame of claim 23, wherein the tie-down assembly includes:

a side frame;

a pair of support arms, each arm having a first end coupled to the side frame and a second end;

a mounting plate having at least one opening configured to receive the carriage bolt of the slide mechanism;

a tube having a cylindrical surface integrated with the mounting plate; and a pivot pin configured to couple the second end of the support arm to the tube and the mounting plate.

- 28. (Withdrawn) The trailer frame of claim 23, wherein the trailer frame includes a first side and a second side, and wherein the slide mechanism extends perpendicular with respect to the first and the second sides.
- 29. (Withdrawn) The trailer frame of claim 23, wherein the tie-down assembly includes:

a plate member having an angled portion coupled to a base portion, the base portion having at least one opening to receive a carriage bolt coupling the tied down assembly to the slide mechanism, and wherein the angled portion includes an opening and a rounded free end.

Claims 30-32 (Cancelled).

33. (Withdrawn) The trailer frame of claim 23, wherein the tie-down assembly includes a bumper having an opening to receive the carriage bolt of the slide mechanism.

Page 8 of 15

Claim 34 (Cancelled).

- 35. (Withdrawn) The trailer frame of claim 23, wherein the elongated member of the slide mechanism is a bunk pad, and wherein the tie-down assembly includes a bunk coupled by the carriage bolt to the slide mechanism.
- 36. (Previously Presented) A slide mechanism for mounting a tie-down assembly on a trailer, comprising:

an elongated member having an axial length, including:

a slot extending the axial length of the elongated member, the slot having a gap width; and

a channel disposed parallel to and in communication with the slot, the channel having a width that exceeds the gap width of the slot; and a carriage bolt having a head, an elongated neck and a guide disposed between the head and the elongated neck and configured to extend through the slot, the head having a width exceeding the gap width of the slot, and the neck including a threaded external portion configured to receive an internally threaded tightening nut coupling the tie-down assembly to the slide mechanism;

wherein:

the channel is configured to receive and maintain the carriage bolt head adjacent to the slot; and

the guide is generally square shaped and has a width that extends across the gap width of the slot.

Page 9 of 15

37. (Previously Presented) A slide mechanism for mounting a tie-down assembly on a trailer, comprising:

an elongated member having an axial length, including:

a slot extending the axial length of the elongated member, the slot having a gap width; and

a channel disposed parallel to and in communication with the slot,
the channel having a width that exceeds the gap width of the slot; and
a carriage bolt having a head and an elongated neck, the head having a width
exceeding the gap width of the slot;

wherein:

the channel includes a round-shaped portion configured to receive a round-shaped head portion of the carriage bolt and maintain the carriage bolt head adjacent to the slot; and the carriage bolt neck is configured to couple the tie-down assembly to the slide mechanism.

38. (Previously Presented) A slide mechanism for mounting a tie-down assembly on a trailer, comprising:

an elongated member having an axial length, including:

a slot extending the axial length of the elongated member, the slot having a gap width; and

a channel disposed parallel to and in communication with the slot,
the channel having a width that exceeds the gap width of the slot; and
a carriage bolt having a head and an elongated neck, the head having a width
exceeding the gap width of the slot;

wherein:

the channel is configured to receive and maintain the carriage bolt head adjacent to the slot;

Page 10 of 15

the elongated member defines an opening configured to receive the carriage bolt head into the channel; and

the carriage bolt neck is configured to couple the tie-down assembly to the slide mechanism.

39. (Previously Presented) A slide mechanism for mounting a tie-down assembly on a trailer, comprising:

an elongated member having an axial length, including:

a horizontal plate having a pair of side portions;

a slot extending the axial length of the elongated member, the slot having a gap width; and

a channel disposed parallel to and in communication with the slot, the channel having a width that exceeds the gap width of the slot; and

a carriage bolt having a head and an elongated neck, the head having a width exceeding the gap width of the slot;

wherein:

the channel is configured to receive and maintain the carriage bolt head adjacent to the slot; and

the carriage bolt neck is configured to couple the tie-down assembly to the slide mechanism.

Serial No.: 10/811,175 Response

Page 11 of 15

40 (Previously Presented) A trailer frame for transporting a load, the trailer frame supported on an axle and a pair of wheels, comprising:

a tie-down assembly configured to secure a load; and

a slide mechanism configured to slidably couple the tie-down assembly to the trailer frame, the slide mechanism including:

an elongated member having an axial length, including:

a slot extending the axial length of the elongated member, the slot having a gap width; and a channel disposed in communication with the slot, the channel having a width that exceeds the gap width of the slot; and

a carriage bolt with a head having a width that exceeds the gap width of the slot;

wherein:

the channel is configured to maintain the carriage bolt head adjacent to the slot; the carriage bolt is configured to receive the tie-down assembly; and the tie-down assembly includes a post coupled to an L-shaped mounting plate with an opening configured to receive the carriage bolt.

Page 12 of 15

41. (Previously Presented) A trailer frame for transporting a load, the trailer frame supported on an axle and a pair of wheels, comprising:

a tie-down assembly configured to secure a load; and

a slide mechanism configured to slidably couple the tie-down assembly to the trailer frame, the slide mechanism including:

an elongated member having an axial length, including:

a slot extending the axial length of the elongated member, the slot having a gap width; and a channel disposed in communication with the slot, the channel having a width that exceeds the gap width of the slot; and

a carriage bolt with a head having a width that exceeds the gap width of the slot;

wherein:

the channel is configured to maintain the carriage bolt head adjacent to the slot; the slide mechanism is mounted along the side of the trailer frame;

the tie-down assembly includes a spare tire assembly having a mounting plate with at least one opening configured to receive the carriage bolt and slidably couple the tie-down assembly to the slide mechanism; and

the carriage bolt is configured to receive the tie-down assembly.